## **LISTING OF CLAIMS:**

1. (Currently Amended) A bio-liquid crystal polymer, comprising a <u>polymer derived</u> from an aromatic compound found in nature tissue-derived compound or the derivatives, wherein:

said derived polymer comprises an aromatic ring in a main chain,

said bio-liquid crystal polymer has a characteristic of liquid crystal under predetermined conditions and is biocompatible.

- 2. (Original) The bio-liquid crystal polymer according to claim 1, wherein said bioliquid crystal polymer has a solubility to a solvent.
- 3. (Original) The bio-liquid crystal polymer according to claim 1, wherein said predetermined conditions include a temperature of said bio-liquid crystal polymer.
- 4. (Currently Amended) A bio-liquid crystal polymer, comprising a polymer derived from polyhydroxycinnamic acid, wherein:

said derived polymer comprises an aromatic ring in a main chain, and said bio-liquid crystal polymer is biocompatible.

- 5. (Currently Amended) A bio-liquid crystal polymer, comprising a copolymer which is synthesized by polymerizing two kinds of aromatic series compounds found in nature -natural products-which have two or more reactive functional groups and are capable of polymerizing, wherein said copolymer comprises an aromatic ring in a main chain.
- 6. (Currently Amended) A bio-liquid crystal polymer, comprising a copolymer which is produced by polymerizing a) any one of aromatic series compounds found in nature natural products which have two or more reactive functional groups and are capable of polymerizing and b) one or more selected from nucleic acids, amino acids, saccharides, fatty acids, terpenes,

Serial No. 10/627,995

porphyrins, flavonoids, steroids and alkaloids which have two or more reactive functional groups and are capable of polymerizing.

wherein said copolymer comprises an aromatic ring in a main chain.

- 7. (Canceled)
- 8. (Currently Amended) A bio-liquid crystal polymer, comprising a homopolymer which is produced by polymerizing an aromatic series compound found in nature natural product which has two or more reactive functional groups and are capable of polymerizing.

wherein said homopolymer comprises an aromatic ring in a main chain.

- 9. (Canceled)
- 10. (Canceled)
- 11. (Original) A bio-liquid crystal polymer, comprising a copolymer of hydroxycinnamic acid and lithocholic acid.
  - 12. (Original) The bio-liquid crystal polymer according to claim 11, wherein: said bio-liquid crystal polymer includes lithocholic acid of 0 to 70 mol%.
  - 13. (Original) The bio-liquid crystal polymer according to claim 11, wherein: said bio-liquid crystal polymer includes lithocholic acid of 0 to 30 mol%.
- 14. (Original) A shaped material for biocompatible parts, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.
- 15. (Original) A shaped material for parts requiring mechanical strength and thermal resistance, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.
- 16. (Original) A shaped material for fibers, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.

17. (Original) A shaped material for optical parts having an optical characteristic to be changed by light irradiation or heating, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.